

STUDIES ON SOME INDIAN APHELINID PARASITES  
(HYMENOPTERA: CHALCIDOIDEA)<sup>1</sup>

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(With twenty-one text-figures)

An account is given of five Indian species of the family Aphelinidae belonging to the genera *Physcus* Howard, *Coccophagus* Westwood and *Aneristus* Howard. *Physcus gunturensis* sp. n. has been described in detail. Material has been deposited in the Zoological Museum, Aligarh Muslim University, Aligarh.

***Physcus gunturensis* sp. nov. (figs. 1-9)**

FEMALE:

**Head** (fig. 1):— Yellowish brown, wider than long in facial view (0.34:0.26 mm.); frontovertex slightly more than one and a half times wider than long; ocelli arranged in obtuse triangle, basal ocellus separated by its diameter from eye rim and about twice its diameter from occipital margin; malar space slightly longer than eyes width (0.1:0.09 mm.); malar sutures distinct; mandibles with apical acute tooth and a lower broad truncation; maxillary and labial palpi 2 and 1-segmented respectively.

**Antennae** (fig. 2):— Orange yellow except radicle, basal three-fourths of scape and first funicle segment are dark brown; scape three and a half times longer than wide; pedicel slightly shorter than first funicle segment; funicle segments third and fourth slightly more than one and a half times longer than wide; club slightly more than three times longer than wide.

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**Thorax:**— Dark brown; pronotum with anterior margin deeply concave in middle (fig. 3); scutum profusely setose; axilla and parapside each with single seta; scutellum longitudinally reticulate bearing three pairs of setae (fig. 4).

**Fore wings:**— Hyaline, two and a half times longer than wide; costal cell broad; submarginal vein with 11 setae and 18 bullae; stigmal vein one-fourth the length of marginal vein; postmarginal vein slightly developed (fig. 5).

**Hind wings:**— Hyaline, four and a half times longer than wide; marginal fringe one-half of wing width.

**Legs.**— Orange yellow; middle tibial spur as long as basitarsus (fig. 6).

**Abdomen:**— Brownish, longer than thorax; subgenital plate of uniform width, central notch of posterior margin followed by laterally directed ridges (fig. 7); ovipositor concealed, second valvifer of uniform width with a mid longitudinal ridge; third valvulae movably articulated with second valvifers (fig. 8).

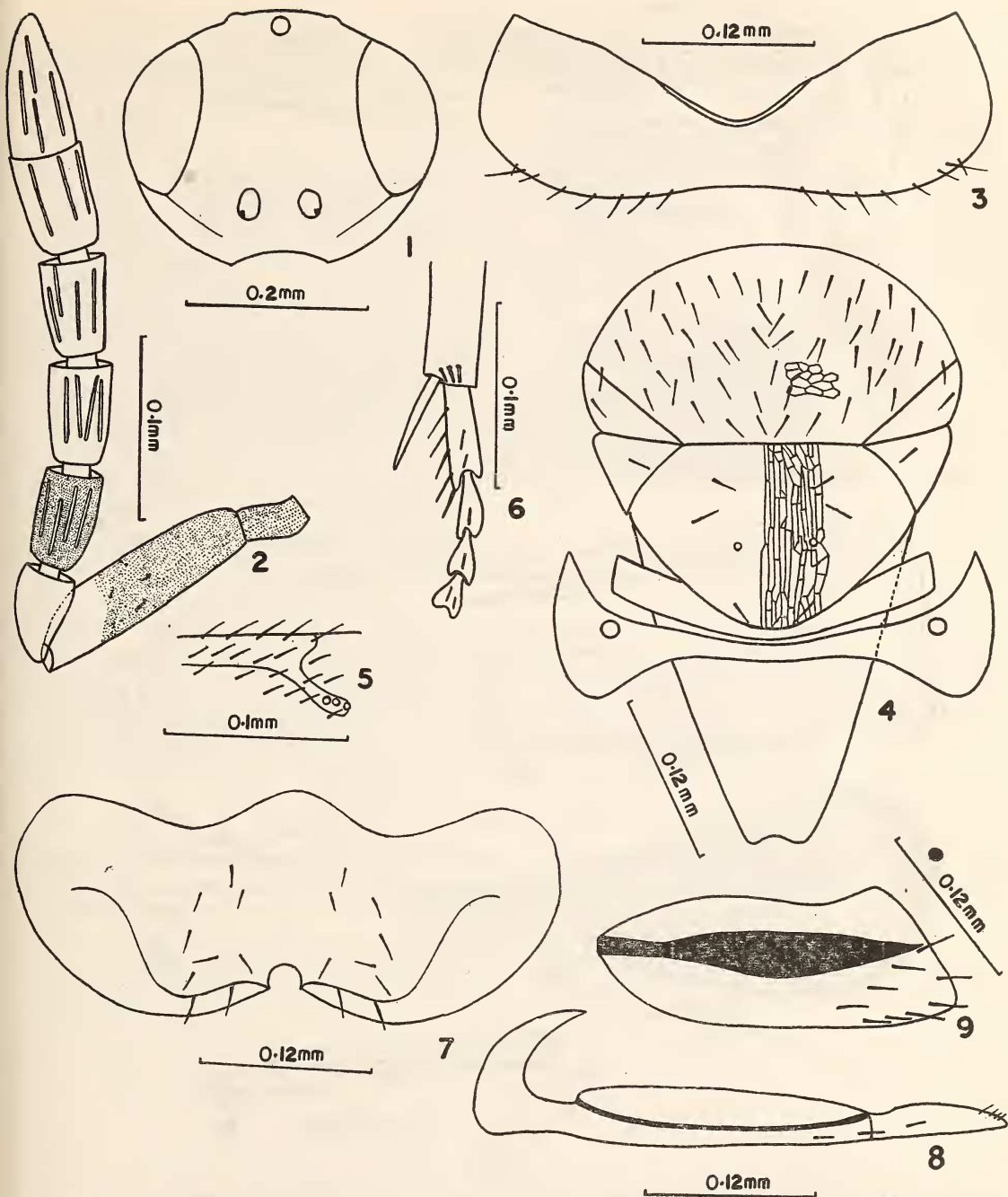
Female length: 0.97 mm.

**Holotype** ♀, INDIA, Andhra Pradesh, Guntur, ex *Aonidielle orientalis* (Newstead), 10.ii.1971 (S. Adam Shafee).

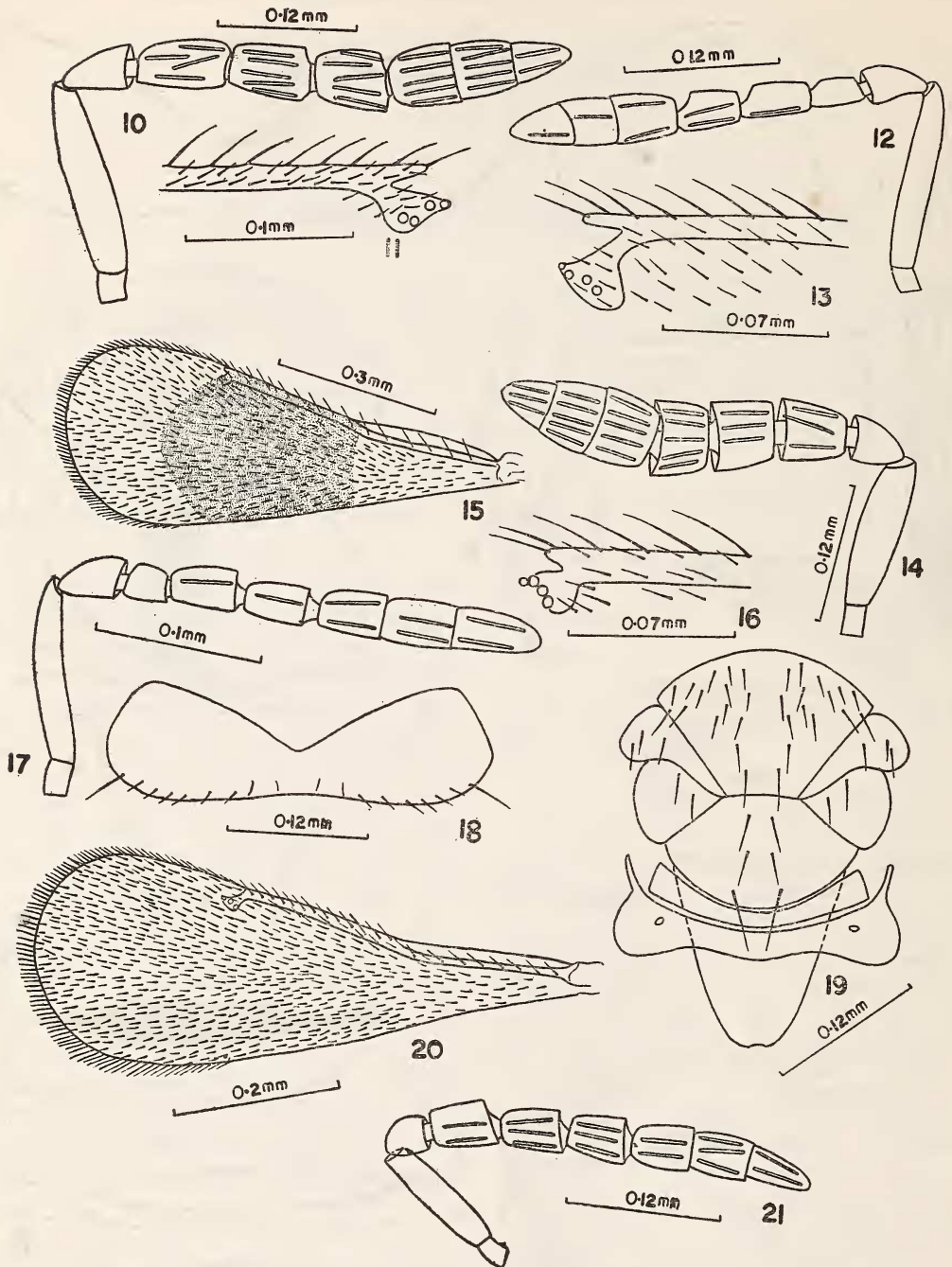
**Paratypes** 4 ♀, (Same date as for holotype).

This species is closely related to *Physcus reticulatus* Compere & Annecke, but the two can be differentiated as follows:

NEW DESCRIPTIONS



Figs. 1-9. *Physcus gunturensis* sp. nov. ♀: (1) Head; (2) Antenna; (3) Pronotum; (4) Thorax; (5) Part of fore wing venation; (6) Part of middle leg; (7) Subgenital plate; (8) Second valvifer; (9) Outer plate of genitalia.



Figs. 10, 11. *Coccophagus cowperi* Girault, ♀: (10) Antenna; (11) Part of fore wing venation.  
 Figs. 12, 13. *Coccophagus bivittatus* Compete, ♀: (12) Antenna; (13) Part of fore wing venation.  
 Figs. 14-16. *Aneristus ceroplastae* Howard, ♀: (14) Antenna; (15) Fore wing; (16) Part of fore wing venation.  
 Figs. 17-21. *Coccophagus longiclavatus* Shafee, ♂, ♀: (17) Antenna, ♀; (18) Pronotum, ♀; (19) Thorax, ♀; (20) Fore wing, ♀; (21) Antenna, ♂.

## NEW DESCRIPTIONS

*P. reticulatus* Compere & Annecke

Scape white, five times longer than wide.

Pedicel as long as first funicle segment.

Club almost as long as funicle.

Abdomen yellow.

*P. gunturensis* sp. n.

Scape dark brown in basal three-fourth, three and a half times longer than wide.

Pedicel shorter than first funicle segment.

Club distinctly shorter than funicle.

Abdomen brownish.

***Coccophagus cowperi*** Girault (figs. 10, 11)

*Coccophagus cowperi* Girault; Compere, 1931, *Proc. U.S. natn. Mus.*, 78:57.

*Material examined*.— 25 ♀, 8 ♂, INDIA, Andhra Pradesh, Nellore, Bucchireddipalam, ex *Ceroplastodes cajani* (Maskell) on *Psidium guajava* Linn., 27.ii.1968; 9 ♀, ex *Saissetia coffeae* Walker.

***Coccophagus bivittatus*** Compere (figs. 12, 13)

*Coccophagus bivittatus* Compere, 1931, *Proc. U.S. natn. Mus.*, 78:73-74.

*Material examined*.— 4 ♀, INDIA, Tamil Nadu, Tenaksi, ex *Coccus* sp. on *Psidium guajava* Linn., 5.iii.1967 (S. Adam Shafee); 8 ♀, 1 ♂, Uttar Pradesh, Ghaziabad, ex *Anomalococcus crematogasteri* Green, on *Prosopis*

*spicegera* Linn., 5.vii.1970; 2 ♀, Rajasthan, Jaipur, Ramgadh Bundh, ex *Eriococcus lagerstromiae* Kuwana on wild plant.

***Coccophagus longiclavatus*** Shafee (figs. 17-21)

*Coccophagus longiclavatus* Shafee, 1972, *Bull. Ent.* 13:25.

*Material examined*.— 2 ♀, INDIA, Utter Pradesh, Aligarh, ex *Coccus* sp. on *Mangifera indica* Linn., (S. Adam Shafee).

***Aneristus ceroplastae*** Howard (figs. 14-16)  
*Aneristus ceroplastae* Howard; Compere, 1936, *Univ. Calif. Publs. Ent.* 6:287-288.

*Material examined*.— 15 ♀, 5 ♂, INDIA, Utter Pradesh, Aligarh, ex *Coccus* sp. on *Hibiscus rosasinensis*, 8.ix.1969, (S. Adam Shafee).

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